

short-cylindric, 0.33 to 0.5 inch long, sweet and abundant; drupelets large and black. Flowers the middle of June, fruit ripe the middle of August.

The only stations yet found are on Stephens Hill (type) in the northern part of Windham, in Windham County, Vermont, at an altitude of about 2,000 feet, and in Grafton, Vermont, in the road from Grafton to Londonderry, one mile west of Houghtonville, at an altitude of 1,500 feet, the stations being about four miles apart.

I discovered the Windham station for this species in 1903, and in 1904 I made a careful study of it, visiting it many times. It covers at least an acre in a rather dry sheep-pasture to the entire exclusion of other blackberries, though scrub spruces threaten to injure it. It is a profuse bearer and the fruit is of a fine flavor. Several times I have eaten my fill of it. Though it was such a distinct plant, yet I was loath to publish it from a single station. But after visiting it again June 22, 1905, I had the good fortune to find it the next day in Grafton. Here it is exactly the same plant, though a little larger, as it grows in a more favorable place and there is good reason to believe that it is not a mere local plant.

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REVIEWS

Rydberg's *Flora of Colorado**

Not since the "Flora of Montana," by Dr. P. A. Rydberg, appeared in 1900, has anything of comparable importance been issued upon the plants of the interior west. A flora of Colorado is essentially a flora of the Middle Rocky Mountains. The great Centennial State with its exceedingly diversified soils, extreme variation in altitudes, and great extent in latitude and longitude naturally supplies the conditions for a varied and extensive flora. Wyoming, possessing essentially these same characteristics, is equally prolific, the two floras having very much in

* Rydberg, P. A. *Flora of Colorado*. The Agricultural Experiment Station of the Colorado Agricultural College, Bulletin 100. Pp. i-xxii + 1-448. 1906.

common but differing widely in those plants from the extreme south of the one and the extreme north of the other.

This new flora of Colorado is of so much interest as to warrant a brief history of its origin. During the last decade of the nineteenth century one of the energetic and serious students of the Rocky Mountain plants was Professor C. S. Crandall, of the Agricultural College, at Ft. Collins. During the years of his professorship there he accumulated for the College a very creditable collection of the plants of the state. It was his purpose ultimately to publish, at least an annotated list, but the work was delayed from year to year partly on account of the unsettled state of the nomenclature problem. Finally Professor Crandall was called from the state to take up another line of work. However, since so much work had already been done and since the collection contained so many specimens new to the state and throwing light upon the distribution of the species, the College officers were unwilling to drop the original plan to publish the accumulated results.

The notes, however, were not in shape for publication since Professor Crandall had adhered to the nomenclature of Gray, and the scores of new species, in the copious material at hand, had not been characterized. In casting about for some one to put the notes and the herbarium in shape, this privilege was first offered to the present reviewer, who, for want of time, reluctantly declined what would have been a very pleasant task. Subsequently, appeal was made to the Director of the New York Botanical Garden, through whose kindly consent and encouragement, Dr. P. A. Rydberg was induced to undertake the task. That the preparation of the manuscript could not have fallen into abler hands needs not to be stated, but it is the irony of fate that the work begun by a "conservative" should have been revised and concluded by an "ultra-radical" of the recent school.

We need not concern ourselves here with the vast amount of work that confronted the editor. The volume now before us tells its own story as to that. Nor need we refer to the vexatious delays incident to the printing of so large a technical work with its thousands of citations. The unusual activity both in the

field and in publication has enormously increased the known species during the years since Porter and Coulter's *Flora of Colorado* (1872) and Coulter's *Manual of the Botany of the Rocky Mountain Region* (1885) appeared. The work now before us lists 2,900 species, distributed in 700 genera. Though the list is based upon the collection at Ft. Collins, yet many other collections were consulted, and practically all the literature dealing with that field was reviewed.

While the work is not a "manual," it is more than a mere "list." Analytical keys are given throughout, including one to the orders. The species are listed under the scientific name, without description, followed by a list of the localities. The altitude is frequently indicated but collectors and specimens are not cited.

It need scarcely be said that the order of sequence is that of Engler and Prantl, but in the genera recognized there is a considerable departure from that standard work. Whether segregation has yet reached its limit remains to be seen, but *Astragalus* (of the old-time limits) has expanded into 17 genera; *Rubus* into 3; *Gentiana* into 4, and has itself entirely disappeared. Many other segregations might easily be cited. Fortunately, however, the principal recent synonyms follow the many unfamiliar names that appear, making the list comprehensible without search for the original publication. Since the *Flora* must be of service principally to the trained systematist, it would have facilitated his work if the citation of the binomial used had been given.

It would be an easy matter to take exception to species included, to species excluded, to synonymy indicated, to violations of the law of priority, but the fact that remains is of far greater significance, viz., that a very difficult piece of work has been done remarkably well. The botanical fraternity of the west owes Dr. Rydberg a deep debt of gratitude, and the officers of the Colorado Agricultural College are to be congratulated on the high quality of the work in systematic botany that they are able to place before the public.

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